

## WORK-RELATED LUNG DISEASES

### WHAT IS THE PUBLIC HEALTH ISSUE?

- From 1968 through 2000, pneumoconiosis (lung disease caused by inhalation of dusts) was an underlying or contributing cause of nearly 125,000 deaths in the United States, including over 2,860 deaths in 2000.
- Among adults, 20% to 30% of asthma is caused or aggravated by work exposures.
- An estimated 15% of chronic obstructive pulmonary disease (COPD)—the nation's fourth leading cause of death—is work-related.
- The estimated annual cost of COPD is \$5 billion.

### WHAT HAS CDC ACCOMPLISHED?

CDC conducts surveillance, research, and service aimed at preventing and eliminating occupational respiratory diseases. The prevention of COPD is an important public health issue in the United States. Drawing from a representative sample of the U.S. adult population, a CDC study estimated that nearly 20% of COPD among working adults is occupationally related and identified industries and occupations with a higher-than-expected prevalence of COPD. Increased risk for COPD was identified in the rubber, plastics, and leather manufacturing industries; the textile mill products manufacturing industry; the food products manufacturing industry; agriculture; and construction. COPD was substantially more prevalent in blue-collar industry sectors than in white-collar industry sectors. The study results also suggest an increased risk in other industries, such as utilities and office building services that have not previously been associated with a risk for COPD.

#### *Example of Program in Action*

CDC has initiated collaborative research studies with Tulane University and the University of California on the risk of COPD associated with dust exposures not otherwise regulated. The burden of COPD, particularly among the blue-collar industrial workforce, can be reduced or prevented through measures to reduce hazardous occupational exposures and through effective workplace pulmonary function screening for timely identification and treatment of COPD in its early stages. Reducing the burden of work-related COPD also would reduce significantly the overall burden of COPD in the U.S. adult population. COPD is included as a priority area under the National Occupational Research Agenda for research that will do the most to protect workers from job-related illnesses and injuries.

### WHAT ARE THE NEXT STEPS?

CDC must continue to identify and promote control of workplace exposures that cause debilitating and deadly respiratory diseases. Epidemiologic research is needed to provide the scientific basis for preventing work-related COPD. CDC will evaluate the risks and potential preventive interventions for workers exposed to beryllium and for certain workers in the food processing industry (i.e., microwave popcorn production workers) who may be routinely exposed to substances causing bronchiolitis obliterans, a severe form of COPD. In addition, CDC recently began an aggressive program of research to prevent work-related asthma, including asthma related to nonindustrial building air quality.

For additional information on this or other CDC programs, visit [www.cdc.gov/program](http://www.cdc.gov/program)

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